

ABSTRACT OF THE DISCLOSURE

Method and Apparatus of Peak-to-Average Power Ratio Reduction

- 5 A technique of reducing the Peak-to-Average Power Ratio (PAPR) of Multi-Carrier (MC) modulated signals in which peaks in the baseband signal that lie above a threshold amplitude are detected and used to generate a pulse sequence signal which, after shaping, is subtracted from the baseband signal to reduce its PAPR. The method is spectrally efficient, has a low degree of implementation complexity and hence it is
- 10 also suitable for low-power, portable implementation. Moreover, it is compatible with existing standard-based Orthogonal Frequency Division Multiplex (OFDM) systems. As an example of the performance of the proposed scheme, the amplifier back-off requirement in a Terrestrial Digital Video Broadcast (DVB-T) system can be reduced from 12 to 6 dB, while satisfying the of out-of-band emission specifications
- 15 imposed by the Federal Communications Commission (FCC) spectral mask.